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CHAPTER 97. INSPECT PART 145 REPAIR STATIONS WITHIN THE UNITED STATES

SECTION 1. BACKGROUND

1. PROGRAM TRACKING AND REPORTING SUBSYSTEM (PTRS) ACTIVITY CODES.

A. Maintenance: 3650

B. Avionics: 5650

3. OBJECTIVE. This chapter provides comprehensive guidance for a base inspection for Flight Standards personnel involved in the certificate management of Title 14 of the Code of Federal Regulations (14 CFR) part 145 repair stations.

5. GENERAL.

A. Inspection Initiation. This inspection will be conducted as a result of a work program requirement, a

previous surveillance effort, allegations of improper maintenance, or component failure trends. This inspection is a comprehensive in-depth inspection that encompasses all of the repair station areas of responsibilities. While conducting the inspection, the principal inspector (PI) should verify that the facility and personnel are qualified to perform the maintenance functions as listed in the operations specifications (OpSpecs) and capability list.

B. Work Away from a Fixed Location. The district office where the work is being performed may conduct inspections of repair stations doing work away from a fixed location. The PI from the geographical office performing the inspection should maintain good communications with the parent facility's certificate-holding district office (CHDO) in matters regarding procedures, manuals, equipment, personnel, etc.

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SECTION 2. PROCEDURES

1. PREREQUISITES AND COORDINATION REQUIREMENTS.

- A. Prerequisites:
 - Knowledge of the regulatory requirements of 14 CFR parts 43 and 145
 - Successful completion of the Airworthiness Inspector Indoctrination course(s) or equivalent
 - Previous experience with certification or surveillance of part 145 repair stations

3. REFERENCES, FORMS, AND JOB AIDS.

- A. References (current editions):
 - 14 CFR parts 43, 65, 121, 125, 129, 135, and 145
 - Special Federal Aviation Regulation (SFAR) 36
 - Advisory Circular (AC) 43-207, Correlation, Operation, Design, and Modification of Turbofan/Jet Engine Test Cells
 - AC 65-31, Training Qualification and Certification of Non-Destructive Inspection (NDI) Personnel
 - AC 145-5, Repair Station Internal Evaluation Programs
 - AC 145-9, Guide for Developing and Evaluating Repair Station and Quality Control Manual
 - AC 145-10, Repair Station Training Program
 - AC 43-15, Recommended Guidelines for Instrument Shops
 - 8300.10, Vol. 2, Ch. 2, Issue SFAR 36 Authorization
 - Order 8300.10, Airworthiness Inspector's Handbook, Vol. 2, Ch. 69, Evaluate

- Part 121/135 Outsource Maintenance Arrangement
- 8300.10, Vol. 2, Ch. 161, Introduction to Part 145 Repair Stations
- 8300.10, Vol. 2, Ch. 162, Procedures for Certificating Part 145 Repair Stations/Satellites Located within the United States and its Territories
- 8300.10, Vol. 2, Ch. 164, Evaluate a Repair Station and Quality Control Manual or Revision
- 8300.10, Vol. 2, Ch. 165, Evaluate Part 145 Repair Station Facilities and Equipment
- 8300.10, Vol. 2, Ch. 236, Evaluate Avionics Test Equipment
- 8300.10, Vol. 3, Ch. 144, Inspect Avionics Test Equipment
- 8300.10, Vol. 3, Ch. 133, Evaluate/Inspect Part 121/129/135 and 125 Operator's Outsource Maintenance Organization
- Element Performance Inspection: 1.3.7
- B. Forms. FAA Form 8000-36, PTRS Transmittal.
- C. Job Aids. None.

5. PROCEDURES.

- A. Planning. Before inspecting, the PI should carefully review:
 - Parts 43 and 145
 - Repair Station Manual/Quality Control Manual (RSM/QCM)
 - OpSpecs
 - Safety Performance Analysis System (SPAS), Repair Station Analytical Model (RSAM)

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- Vital Information Subsystem. (VIS)
- CHDO office file
- *B. Conducting the Inspection.* Repair station oversight is accomplished using an enhanced baseline surveillance, whereby the PTRS 3650 and 5650 are divided into 14 individual PTRS codes. This will provide a more comprehensive surveillance plan for repair stations, and ensure that all aspects of part 145 repair station operations are considered. The baseline surveillance is initiated by opening the PTRS activity code 3650/5650, which generates the following 14 required activity codes described in the following volume 3 chapters:
- C. The Repair Station must be able to provide written documentation that reflects the Air Carrier's method for the acceptance of all Repair Station programs, Standard Operating Procedures (SOP), including specific maintenance manuals is performed in accordance with the Carriers CAMP.
 - Chapter 82 (3604/5604) Certificate Requirements
 - Chapter 83 (3605/5605) Records Systems
 - Chapter 84 (3660/5660) Manuals
 - Chapter 85 (3657/5657 Housing and Facilities
 - Chapter 86 (3658/5658) Tools and Equipment
 - Chapter 87 (3656/5656) Technical Data
 - Chapter 88 (3608/5608) Quality Control
 - Chapter 89 (3601/5601) Parts and Materials
 - Chapter 90 (3659/5659) Personnel Record
 - Chapter 92 Training (3661/5661) Training
 - Chapter 93 (3654/5654) Maintenance Process
 - Chapter 94 (3606/5606) Work Away from Station

- Chapter 95 (3663/5663) Contract Maintenance
- Chapter 96 (3618/5618) Air Carrier and Air Operator Requirements
- (1) These 14 chapters constitute a complete repair station inspection.
- (2) All generated activity codes that are applicable to the repair station must be completed and closed before the 3650/5650 PTRS record may be closed. The 3650/5650 would be the required "R" item from the inspector's work program.

NOTE: After completing the 3650/5650 surveillance, and it is determined the repair station does not perform any of the following functions:

- a. Work away from station (PTRS 3606/5606).
- b. Contract Maintenance (PTRS 3663/5663.
- c. Air Carrier & Air Operator requirements (PTRS 3618/5618).

These PTRS activity code records must be closed out in the following manor. Enter "C" (closed) in the Status block and "I" (information) in the Results block. In section IV, Comments enter "E" in the Primary Area block, enter "973" in the Keyword block, and enter "I" in the Opinion Code block, (without the quotes). Enter the following statement in the comment text field, "After completing the surveillance it was determined the repair station does not perform ______" (pick one from a, b, or c above.

(4) Using a System Safety based approach; the PI can plan additional focused inspections according to the risk level identified in each element. The SPAS is the organization's primary source of comprehensive, integrated safety information that is used by inspectors, analysts, and managers in developing and adjusting field surveillance, investigation, and other oversight programs. SPAS interfaces with key fielded oversight programs (such as

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ATOS, SEP, and the NPG), as well as other government and industry sources, collecting raw performance and operational data, analyzing and summarizing the data, and providing critical information in the form of graphs, tables, and reports. These SPAS outputs are then used to (1) identify safety hazard and risk areas; (2) target inspection efforts for repair stations, and to areas of greatest risk; and (3) monitor the effectiveness of targeted oversight actions. SPAS repair station profile and RSAM are available for use. This data provides additional information on performance and risk associated with individual repair station facilities.

NOTE: When completing a focused inspection on one of the 14 elements the PTRS code for that element will be used and not a 3650/5650.

- A. Analyze Findings: Evaluate all deficiencies to determine if corrective actions will be required.
- B. Conduct Debriefing: Brief the certificate holder on the inspection results. Discuss any deficiencies and possible corrective actions.

7. TASK OUTCOMES.

NOTE: This is very important. For this inspection, the PI must close out the PTRS

record with the following statement in block 4! This is to certify that the "R" item issued for this repair station inspection "3650/5650" has been completed.

A. Due to the complexity of this new PTRS requirement, we have built in the capability of transferring one or more of the mandatory 14 items to another FSDO/CMO. However if this has been done, it is the responsibility of the transferring PI to contact the transferee's office to verify that the transferred PTRS has been closed.

B. Complete PTRS.

- *C. Complete the Task.* Competition of this task will result in the following:
 - Send a letter to the operator documenting all deficiencies
 - Initiate an Enforcement Inspection Report if necessary
- D. Document Task. File all supporting paperwork in the certificate holder's file. Update the VIS as required.
- **9. FUTURE ACTIVITIES.** Schedule and conduct followup inspections as applicable.

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